



BEAM POWER AMPLIFIER

Filament Filament Arrangeme	Coated series*	Parallel**	,						
Voltage ~	2.8	1.4	d-c volts						
Current	0.05	0.1	amp.						
Direct Interelectrode Capacitances (Approx.):0									
Grid to Plate Input Output	0.6 8.0 6.5		tuut tuu tuu						
Maximum Overall Length Maximum Seated Height Maximum Diameter Bulb	<u>9</u> _0		3-5/16* 2-3/4* 1-5/16* T-9						
Base	O/ 1-11	Intermediate She							
Pin 1 — No Connection Pin 2 — Filament Pin 3 — Plate	2	Pin 5 - G Pin 7 - F Pin 8 - F	rid il.(-,series) il.(-,parallel)						
Pin 4 — Screen Mounting Position	DOTTON VIEW (C		Any						

BOTTOM VIEW (G-7AP)

Maximum Ratings Are Design-Center Values

AMPLIFIER

Filament Arrangement	Set	ies*		Paral	lel**		
Plate Voltage	110	max.		110	max.	volts	
Screen Voltage	110	max.		110	max.	volts	
Total Zero-Sig. Cath.					max.	ma.	
Typical Operation and Characteristics-Class A1 Amplifier:							
Plate	90	110	85	90	110	volts	
Screen	90	110	85	90	110	vólts	
Grid A	-4.5	-6.6	-5	-4.5		volts	
Peak A-F Grid Voltage	4.5	5.1	5	4.5	5.4	volts	
Plate Cur.	8.0	8.5			10	ma.	
Screen Cur. (approx.)	1.0	1.1	0.8	1.3	1.4	ma.	
Plate Res. (approx.)	80000	110000	70000	90000	100000	ohms	
Transcond.	2000	2000	1950	2200	2200	µmhos	
Load Res.	8000	8000	9000	8000	8000	ohms	
Tot. Harm. Dist.	8.5	8.5	5.5	6.0	6.0	%	
MaxSig.Power Output	230	330	250	270	400	mw.	

- * filament voltage applied across the two sections in series between pins No.2 and No.7. Grid voltage is referred to pin No.7.
- **Filament voltage applied across the two sections in parallel between pin No.8 and pins No.2 and No.7 connected together. Grid voltage is referred to pin No.8.
- # For each 1.4-volt filament section. For series operation of the sections, a shunting resistor must be connected across the section between pins No.7- and No.8 to by-pass any cathode current in excess of the rated maximum per section. When other tubes in series-filament arrangement contribute to the filament current of the 305-GT/G, an additional shunting resistor may be required between pins No.2 and No.7.
- The grid circuit resistance should not exceed 1.0 megohm for either cathode bias or fixed bias operation.
- With a peak a-f grid voltage equal to the grid bias, the power output for the 110-volt condition is: 500 mw at 10% total harmonic distortion for parallel filament Operation: and 400 mw at 10% total harmonic distortion for series filament operation.
- O With no external shield.

Curves shown under Type 1Q5-Gf/G also apply to the 3Q5-Gf/G with the filaments connected in parallel.

--- Indicates a change.

May 1, 1942